What is the impact of weather on my electric bill?

BACKGROUND: It seems simple enough, when it is cold; we use more power to heat our homes to a comfortable level. But when we receive a bill for our utilities and it is more than we expect, perhaps it is time to turn to the weather records, rather than our memories of the days' weather that preceded our bill to understand the impact on our kilowatt (kWh) usage.

The National Weather Service analyzes weather from every possible aspect. One of the tools that they use is something they call the ***Degree Day (DD).***

Degree Day (DD) Analysis: *Is a gauge of the amount of heating or cooling needed for a building using 65 degrees as a baseline. To compute heating/cooling degree-days, take the average temperature for a day and subtract the reference temperature of 65 degrees. If the difference is positive, it is called a "**Cooling Degree Day**". If the difference is negative, it is called a "**Heating Degree Day**". The magnitude of the difference is the number of days. For example, if your average temperature for a day is 50 degrees in September, the difference of the average temperature for that day and the reference temperature of 65 degrees would yield a minus 15. Therefore, you have 15 Heating Degree Days that day. If the average temperature is 77 degrees for a day, you would have 12 Cooling Degree Days (77-65). If the average temperature for the day is 65 degrees, there are no Heating or Cooling degree days. Electrical, natural gas, power, and heating, and air conditioning industries utilize heating and cooling degree information to calculate their energy needs. The Heating season runs from July 1st through June 30th. The Cooling season runs from Jan 1st through Dec 31st.*

In sum, the "***Degree Day (DD)***" measurement takes all the data available for a given location and provides a numeric measure that will indicate whether you should expect a high electric bill based upon the hot or cold weather.

The DD for Lewes, Delaware, is shown below: In November 2012, the DD was 603. In December 2012 the DD was 593 (We had a very mild month of December!).
The January 2013 DD was 804. The month of January had 10 days (1/3 of the month) where the temperatures were below normal for the historic weather in this area during the month of January. There were 6 days in January when the high temperature of the day never rose above freezing (32 degrees).

So, before you call your friendly furnace or air conditioning repair person, you might want to consult the National Weather Service and save yourself some cash!
http://www.nws.noaa.gov/climate/index.php?wfo=phi

QUESTIONS: If you have further questions about the impact of weather on your electric bill, please contact the BPW General Manager, Darrin Gordon: 302-645-6228 or go to: www.lewesbpw.delaware.gov

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